screen is again changed to the screen 800 of FIG. 8 in which another device waits to connect.

[0107] FIG. 10 is a screen 1000 illustrating a photo 1010 registered by a device that prepares a group and a photo 1020 registered by another device that requests connection to the device, after the device is connected to the device that requests connection thereto by pressing the Yes button 913 of FIG. 9. If a connection request of another device is accepted, the device that requests connection is also connected to existing devices, and a photo registered by the device that requests connection is displayed on the screen. FIG. 10 shows that a service is available after a soft AP is accessed.

[0108] Meanwhile, Device 2 having a low priority SSID waits for a short time (operation S662), scans the WLAN (operation S664), and, if a device having connection status information set as a server is found (operation S666), requests connection to the device set as the server (i.e. Device 1 set as the server) (operation S668).

[0109] Additionally, referring to FIG. 6, the wireless connection managers set SSIDs of network cards of at least two devices. In this regard, the SSID may be a type of ID. The wireless connection managers scan the WLAN to search for all SSIDs that are to access the same channel. The wireless connection managers compare priority information between all of the found SSIDs. SSIDs are compared based on SSID serial numbers of respective network cards. An SSID usually has a value like "SECPPC-XXXXXXX" in which a 6 digit value "XXXXXXX" is a serial number that is used to compare this SSID with other SSIDs.

[0110] In this regard, the device having a low priority SSID waits, and the device having a high priority SSID scans the WLAN and is set as a group-S SSID. Setting of the group-S SSID means setting of a kind of a server status S. In this regard, if a network is generated by setting a channel, the device having the group-S waits for a connection request. The device having the low priority SSID scans the WLAN and searches for the group-S SSID, i.e. an SSID of the server. If the SSID of the server is found, the device having the low priority SSID requests connection to a server device having the group-S SSID. If the server device receives a connection request and accepts it, the device having the low priority SSID accesses the network established by the server device and is connected thereto.

[0111] According to the present general inventive concept, all processes for wireless connection between devices are performed as if a user makes inputs and settings, thereby enabling wireless connection between at least two devices. Therefore, errors caused by user's wrong inputs and settings are prevented in advance, and time taken to make user's inputs and settings is reduced.

[0112] Also, although a user has no knowledge of a soft AP or a wireless AP, devices are wirelessly connected easily.
[0113] The present general inventive concept can also be embodied as computer readable code on a computer readable recording medium. The computer readable recording medium is any data storage device that can store data which can be thereafter read by a computer system. Examples of the computer readable recording medium include read-only memory (ROM), random-access memory (RAM), CD-ROMs, magnetic tapes, floppy disks, and optical data storage devices.

[0114] While the present general inventive concept has been particularly shown and described with reference to

exemplary embodiments thereof, it will be understood by those of ordinary skill in the art that various changes in form and details may be made therein without departing from the spirit and scope of the present general inventive concept as defined by the following claims.

[0115] Although a few embodiments of the present general inventive concept have been shown and described, it will be appreciated by those skilled in the art that changes may be made in these embodiments without departing from the principles and spirit of the general inventive concept, the scope of which is defined in the appended claims and their equivalents.

What is claimed is:

- 1. An apparatus comprising:
- a wireless communication module; and
- a processor configured to:

receive connection information from an electronic device external to the apparatus;

- set a first one of the apparatus and the electronic device as a server, and a second one of the apparatus and the electronic device as a client based at least in part on the connection information; and
- establish, using the wireless communication module, a communicative connection between the apparatus and the electronic device based at least in part on the apparatus being set as the server.
- 2. The apparatus of claim 1, wherein the processor is configured to:
  - receive a service set identifier (SSID) corresponding to the electronic device as at least part of the connection information
- 3. The apparatus of claim 1, wherein the processor is configured to:
  - transmit a request to establish the communicative connection to the electronic device based at least in part on the apparatus being set as the client.
- **4**. The apparatus of claim **1**, wherein the processor is configured to:
  - transmit another connection information to the electronic device prior to the setting.
- **5**. The apparatus of claim **4**, wherein the other connection information comprises an SSID, wherein the processor is configured to:
  - add, as at least part of the SSID, media access control address, priority information, connection status information, or channel information corresponding to the apparatus.
- **6.** The apparatus of claim **1**, wherein the connection information comprises priority information corresponding to the electronic device, and wherein the processor is configured to:
  - perform the setting based at least in part on an outcome of comparing the priority information with another priority information corresponding to the apparatus.
- 7. The apparatus of claim 6, wherein the priority information is generated in the electronic device using a first random number, and wherein the processor is configured to: generate the other priority information using a second random number.
- 8. The apparatus of claim 1, wherein the processor is configured to:
  - set the server as a master device, and the client as a slave device.